

***PRELIMINARY AMENDMENT***

***RULE 53(b) CONTINUATION OF U. S. APPLICATION NO. 10/434,150***

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

**Please cancel claims 1-35.**

36. (new): A computer readable medium having program codes executable by a computer to perform a method for describing texture features of an image, the method comprising:

- (a) generating a regularity indicator indicating regularity of the image;
- (b) generating a direction indicator indicating direction of the image;
- (c) generating a scale indicator indicating scale of the texture element of the image; and
- (d) expressing a texture descriptor of the image using the regularity indicator, the direction indicator and the scale indicator.

37. (new): The computer readable medium of claim 36, wherein the regularity of the image is expressed as one of a plurality of predetermined values.

38. (new): The computer readable medium of claim 36, wherein the regularity of the image is expressed as one of values, "irregular," "slightly irregular," "regular" and "highly regular."

39. (new): The computer readable medium of claim 36, wherein the regularity indicator comprises a quantized integer.

40. (new): The computer readable medium of claim 36, wherein the direction of the image is expressed as one of a plurality of predetermined values.

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41. (new): The computer readable medium of claim 36, wherein the direction of the image is expressed as one of values, "no directionality," "0 degree," "30 degree," "60 degree," "90 degree," "120 degree," and "150 degree."

42. (new): The computer readable medium of claim 36, wherein the direction indicator comprises a quantized integer.

43. (new): The computer readable medium. of claim 36, wherein, the scale of the texture element is expressed as one of a plurality of predetermined values.

44. (new): The computer readable medium of claim 36, wherein the scale of the texture element is expressed as one of values, "fine," "medium," "coarse," and "very coarse."

45. (new): The computer readable medium of claim 36, wherein the the scale indicator comprises a quantized integer.

46. (new): The computer readable medium of claim 36, wherein the texture descriptor of the image is expressed as a vector of the regular indicator, the direction indicator, and the scale indicator.

47. (new): The computer readable medium of claim 36, wherein the direction indicator comprises a dominant direction of the image.

48. (new): The computer readable medium of claim 47, wherein the scale indicator comprises a scale corresponding to the dominant direction of the image.

49. (new): The computer readable medium of claim 48, wherein the direction indicator comprises a first direction indicator and a second direction indicator comprising a first dominant direction of the image and a second dominant direction of the image, respectively.

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50. (new): The computer readable medium of claim 49, wherein the scale indicator comprises a first scale indicator comprising a scale corresponding to the first dominant direction of the image and a second scale indicator comprising a scale corresponding to the second dominant direction of the image.

51. (new): The computer readable medium of claim 50, wherein the texture descriptor of the image comprises a vector of the regularity indicator, the first direction indicator, the second direction indicator, the first scale indicator, and the second scale indicator.

52. (new): An apparatus for describing texture features of an image, comprising:  
a generating unit to generate a regularity indicator indicating regularity of the image, a direction indicator indicating direction of the image, and a scale indicator indicating scale of a texture element of the image; and  
an expressing unit to express a texture descriptor of the image using the regularity indicator, the direction indicator and the scale indicator.

53. (new): The apparatus of claim 52, wherein the regularity indicator expresses the regularity of the image as one of a plurality of predetermined values.

54. (new): The apparatus of claim 52, wherein the regularity indicator expresses the regularity of the image as one of values, "irregular," "slightly irregular," "regular" and "highly regular."

55. (new): The apparatus of claim 52, wherein the regularity indicator comprises a quantized integer.

56. (new): The apparatus of claim 52, wherein the direction indicator expresses the direction of the image as one of a plurality of predetermined values.

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57. (new): The apparatus of claim 52, wherein the direction indicator expresses the direction of the image as one of values, "no directionality," "0 degree," "30 degree," "60 degree," "90 degree," "120 degree," and "150 degree."

58. (new): The apparatus of claim 52, wherein the direction indicator comprises a quantized integer.

59. (new): The apparatus of claim 52, wherein the scale indicator expresses the scale as one of a plurality of predetermined values.

60. (new): The apparatus of claim 52, wherein the scale indicator expresses the scale as one of values, "fine," "medium," "coarse," and "very coarse."

61. (new): The apparatus of claim 52, wherein the scale indicator comprises a quantized integer.

62. (new): The apparatus of claim 52, wherein the texture descriptor of the image is expressed as a vector of the regularity indicator, the direction indicator, and the scale indicator.

63. (new): The apparatus of claim 52, wherein the direction indicator comprises a dominant direction of the image.

64. (new): The apparatus of claim 52, wherein the scale indicator comprises a scale corresponding to the dominant direction of the image.

65. (new): The apparatus of claim 52, wherein the direction indicator comprises a first direction indicator and a second direction indicator comprising a first dominant direction of the image and a second dominant direction of the image, respectively.

66. (new): The method of claim 65, wherein the scale indicator comprises a first scale indicator comprising a scale corresponding to the first dominant direction of the image and a

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second scale indicator comprising a scale corresponding to the second dominant direction of the image.

67. (new): The apparatus of claim 66, wherein the texture descriptor of the image comprises a vector of the regular indicator, the first directionn indicator, the second direction indicator, the first scale indicator, and the second scale indicator.